Cell Tissue Kinet. (1980) **13**, 695–699

AUTHOR INDEX
Volume 13

AARNÆS, E., *see* Thorud, E.
AHERNE, W.A., ZAITOUN, A.M., LAUDER, I. & HULL, D.L. Cytokinetic changes in the thymus of tumour-bearing and of dexamethasone-treated mice 485
ALABASTER, O., *see* Woo, K.B.
AMANO, M., *see* Hamatani, K.
APPLETON, D.R., *see* Wright, N.A.

BAGWELL, C.B., *see* Collins, J.M.
BARFOD, I.H. & BARFOD, N.M. Cell production rates estimated by the use of vincristine sulphate and flow cytometry. I. An *in vitro* study using murine tumour cell lines 1
BARFOD, I.H. & BARFOD, N.M. Cell production rates estimated by the use of vincristine sulphate and flow cytometry. II. Correlation between the cell production rates of ageing ascites tumours and the number of S phase tumour cells 9
BARFOD, N.M., *see* Barfod, I.H.
BECK, H.-P. Evaluation of flow cytometric data of human tumours. Correction procedures for background and cell aggregations 173
BERGERON, M., *see* Sassier, P.
BERRY, D.E., *see* Collins, J.M.
BEUNINGEN, D., VAN, *see* Streffer, C.
BJERKNES, R., *see* Thorud, E.
BLAES, N., BOURDILLON, M.C., CROUZET, B. & BOISSEL, J.P. Variations in growth and cell cycle time of arterial muscle cells cultured at low density 445
BÖHMER, R.-M. Determination of non-proliferating cells in culture by combining flow cytometry with stathmokinetics 497
BOISSEL, J.P., *see* Blaes, N.
BOURDILLON, M.C., *see* Blaes, N.
BRIGANTI, G., LEVI, G., SPALLETTA, E., GALLONI, L. AND MAURO, F. Effect of bleomycin on mouse haemopoietic colony-forming cells in culture (CFUc) 145
BRUNTON, G.F. & WHELDON, T.E. The Gompertz equation and the construction of tumour growth curves 455

CAMPLEJOHN, R.S. A critical review of the use of vincristine (VCR) as a tumour cell synchronizing agent in cancer therapy 327
CAMPLEJOHN, R.S., SCHULTZE, B. & MAURER, W. An *in vivo* double labelling study of the subsequent fate of cells arrested in metaphase by vincristine in the JB-1 mouse ascites tumour 239
CHANANA, A.D., *see* Webb, P.

CHERTKOV, J.L. & GUREVITCH, O.A. Self-maintenance ability and kinetics of haemopoietic stroma precursors 535
CLAUSEN, O.P.F., *see* Thorud, E.
COLLINS, J.M., BERRY, D.E. & BAGWELL, C.B. Variability of short-term cultures of HeLa S-3 cells: changes in DNA distributions and rates of DNA synthesis 277
CORBETT, T.H., *see* Simpson-Herren, L.
CROIZAT, H., FRINDEL, E. & TUBIANA, M. The effect of partial body irrigation on haemopoietic stem cell migration 319
CRONKITE, E.P., *see* Webb, P.
CROUZET, B., *see* Blaes, N.

DEAN, P.N. A simplified method of DNA distribution analysis 299
DEMEESTERE, M., ROCKWELL, S., VALLERON, A.-J., FRINDEL, E. & TUBIANA, M. Cell proliferation in EMT6 tumours treated with single doses of X-rays or hydroxyurea. II. Computer simulations 309
DENEKAMP, J., *see* Hirst, D.G.; *see also* Stewart, F.A.
DESAIVE, C., *see* Zietz, S.
DETHLEFSEN, L.A., *see* Tomasovic, S.P.

FARBMAN, A.I. Renewal of taste bud cells in rat circumvallate papillae 349
FEHÉR, I. & GIDALI, J. Protection of cycling CFUs against hydroxyurea by low doses of actinomycin D 415
FLETCHER, J., *see* Standen, G.
FRANKO, A.J. & KALLMAN, R.F. Cell loss and influx of labeled host cells in three transplantable mouse tumors using [^{125}I]UdR release 381
FRANZÉN, L. & NORRBY, K. Local mitogenic effect of tissue mast cell secretion 635
FRIEDMAN, D.L., *see* Kurz, J.B.
FRINDEL, E., *see* Croizat, H.; *see also* Demeestere, M.
FUNKHOUSER, W.K., *see* Woo, K.B.

GALLONI, L., *see* Briganti, G.
GERGELY, H., *see* Nakai, G.S.
GIDALI, J., *see* Fehér, I.
GLASER, D.A., *see* Storrie, B.
GOLDFEDER, A., *see* Potmesil, M.
GRATTAROLA, M., *see* Zietz, S.
GRISWOLD, D.P., *see* Simpson-Herren, L.
GUREVITCH, O.A., *see* Chertkov, J.L.

HALL, D.J., *see* O'Leary, J.J.
HAMATANI, K. & AMANO, M. Different labelling patterns in mouse lymphoid tissues with [^{3}H]deoxycytidine and [^{3}H]thymidine 435
HANRAHAN, L.R., O'LEARY, J.J., MEHTA, C. & ROSENBERG, A. Kinetics of human lymphocyte responses *in vitro*: the phase of exponential growth 33
HANRAHAN, L.R., *see* O'Leary, J.J.

HIRST, D.G., DENEKAMP, J. & HOBSON, B. Proliferation studies of the endothelial and smooth muscle cells of the mouse mesenery after irradiation 91
HIRST, D.G., *see* Stewart, F.A.
HOBSON, B., *see* Hirst, D.G.
HODGESON, G.S., *see* Hopper, J.L.
HOPEWELL, J.W., *see* Hubbard, B.M.
HOPKINS, H.A., *see* Moore, J.V.
HOPPER, J.L., RADLEY, J.M. & HODGESON, G.S. A random walk model for the analysis of the isoprenaline-stimulated proliferative response of the rat submaxillary gland 519
HUBBARD, B.M. & HOPEWELL, J.W. Quantitative changes in cellularity of the rat subependymal plate after X-irradiation 403
HULL, D.L., *see* Aherne, W.A.

JOEL, D.D. *see* Webb, P.
JOHNSON, N.W., *see* Scragg, M.A.

KALLMAN, R.F., *see* Franko, A.J.; *see also* Schoenfield, D.
KLEIN, H.O. Cell kinetic alterations in normal and neoplastic cell populations *in vitro* and *in vivo* following vincristine. A reply to Dr Camplejohn's review article 425
KLEIN, R.M. Analysis of intestinal cell proliferation after guanethidine-induced sympathectomy. III. Effects of chemical sympathectomy on circadian variation in mitotic activity 153
KONRAD, M.W., *see* Storrie, B.
KURZ, B. & FRIEDMAN, D.L. New methods of cell cycle analysis based on the selective tagging of cells either at the beginning or end of S-phase 575

LAISSUE, J.A., *see* Webb, P.
LAUDER, I., *see* Aherne, W.A.
LESSIN, S., *see* Zietz, S.
LEVI, G., *see* Briganti, G.
LIN, H.-S. Peritoneal exudate mononuclear phagocyte colony-forming cells: their proliferative state *in vivo* and sensitivity to cytotoxic agents 395
LINDMO, T., *see* Rofstad, E.K.
LOEFFLER, M. & WICHMANN, H.E. A comprehensive mathematical model of stem cell proliferation which reproduces most of the published experimental results 543
LOONEY, W.B., *see* Moore, J.V.

MAURER, W., *see* Camplejohn, R.S.
MAURO, F., *see* Briganti, G.
MEHTA, C., *see* Hanrahan, L.R.; *see also* O'Leary, J.J.
MOLLS, M., *see* Streffer, C.
MOORE, J.V., HOPKINS, H.A. & LOONEY, W.B. Dynamic histology of a rat hepatoma and the response to 5-fluorouracil 53

NAKAI, G.S. & GERGELY, H. Effect of Ehrlich ascites cell chalone on nascent DNA synthesis in isolated nuclei 65

NICOLINI, C., *see* Zietz, S.
NORRBY, K., see Franzén, L.

OFTEBRO, R., *see* Rofstad, E.K.
O'LEARY, J.J., HANRAHAN, L.R., MEHTA, C. & ROSENBERG, A. Kinetics of human lymphocyte responses *in vitro*: determination of clone size and initial rate of entry into DNA synthesis 41
O'LEARY, J.J., MEHTA, C., HALL, D.J. & ROSENBERG, A. Quantitation of [^{3}H]-thymidine uptake by stimulated human lymphocytes 21
O'LEARY, J.J., *see* Hanrahan, L.R.
OLIVOTTO, M. & PAOLETTI, F. Studies of the kinetics of initial cycle progression *in vitro* of ascites tumour cells subsequent to isolation from ascites fluid 605

PAOLETTI, F., *see* Olivotto, M.
PETTERSEN, E.O., *see* Rofstad, E.K.
PHILIP, M.A., *see* Standen, G.
POTMESIL, M. & GOLDFEDER, A. Cell kinetics of irradiated experimental tumors: cell transition from the non-proliferating to the proliferating pool 563

RADLEY, J.M., *see* Hopper, J.L.
ROCKWELL, S. *see* Demeestere, M.
ROFSTAD, E.K., PETTERSEN, E.O., LINDMO, T. & OFTEBRO, R. The proliferation kinetics of NHIK 1922 cells *in vitro* and in solid tumours in athymic mice 163
ROSENBERG, A., *see* Hanrahan, L.R.; *see also* O'Leary, J.J.
ROTI ROTI, J.L., *see* Tomasovic, S.P.

SASSIER, P. & BERGERON, M. Existence of an endogenous inhibitor of DNA synthesis in rabbit small intestine specifically effective on cell proliferation in adult mouse intestine 251
SCHMITZ, E., *see* Schulte-Hermann, R.
SCHOENFELD, D. & KALLMAN, R.F. Determining the labeling index in autoradiography 339
SCHULTE-HERMANN, R. & SCHMITZ, E. Feedback inhibition of hepatic DNA synthesis 371
SCHULTZE, B., *see* Camplejohn, R.S.
SCHULZ, S., *see* Streffer, C.
SCRAGG, M.A. & JOHNSON, N.W. A comparison of *in vivo* and *in vitro* stathmokinetic methods for the study of cell proliferation in hamster oral epithelia 359
SIMPSON-HERREN, L., CORBETT, T.H. & GRISWOLD, D.P. The cell population kinetics and response to an S-phase specific agent of three transplantable colon tumor lines 613
SPALLETTA, E., *see* Briganti, G.
STANDEN, G., PHILIP, M.A. & FLETCHER, J. The proliferative state of granulocytic progenitor cells in human blood and marrow 105
STEEL, G.G. Species-dependent growth patterns for mammalian neoplasms 451
STEWART, F.A., DENEKAMP, J. & HIRST, D.G. Proliferation kinetics of the mouse bladder after irradiation 75

STORRIE, B., KONRAD, M.W. & GLASER, D.A. Arrested growth of chinese hamster ovary (CHO) cell colonies on agar 263
STREFFER, C., BEUNINGEN, D., VAN, MOLLS, M., ZAMBOGLOU, N. & SCHULZ, S. Kinetics of cell proliferation in the pre-implanted mouse embryo *in vivo* and *in vitro* 135
SULLIVAN, C., *see* Woo, K.B. 135

TANNOCK, I. Guest Editorial. Cell kinetics—where to now? 571
THORUD, E., CLAUSEN, O.P.F., BJERKNES, R. & AARNÆS, E. The stathmokinetic method *in vivo*. Time-response with special reference to circadian variations in epidermal cell proliferation in the hairless mouse 625
TOMASOVIC, S.P., ROTI ROTI, J.L. & DETHLEFSEN, L.A. Matrix algebraic simulation of mitotic cell selection experiments 117
TUBIANA, M., *see* Croizat, H.; *see also* Demeestere, M.

VALLERON, A.-J., *see* Demeestere, M.
VISSER, T.P., *see* Wagemaker, G.

WAGEMAKER, G. & VISSER, T.P. Erythropoietin-independent regeneration of erythroid progenitor cells following multiple injections of hydroxyurea 505
WEBB, P., CHANANA, A.D., CRONKITE, E.P., LAISSUE, J.A. & JOEL, D.D. Comparison of DNA renewal in germ-free and conventional mice using [^{125}I]iodo-deoxyuridine and [^{3}H]thymidine 227
WHELDON, T.E., *see* Brunton, G.F.
WICHMANN, H.E., *see* Loeffler, M.
WOO, K.B., FUNKHOUSER, W.K., SULLIVAN, C. & ALABASTER, O. Analysis of the proliferation kinetics of Burkitt's lymphoma cells 591
WRIGHT, N.A. & APPLETON, D.R. The metaphase arrest technique. A critical review 643

ZAITOUN, A.M., *see* Aherne, W.A.
ZAMBOGLOU, N., *see* Streffer, C.
ZIETZ, S. Fp_i analysis. I. Theoretical outline of a new method to analyze time sequences of DNA histograms 461
ZIETZ, S., LESSIN, S., GRATTAROLA, M., DESAIVE, C. & NICOLINI, C. Fp_i analysis. II. Use of the method to monitor the *in vivo* kinetics of cell populations perturbed by hydroxyurea 473
ZIPORI, D. *In vitro* proliferation of mouse lymphoblastoid cell lines: growth modulation by various populations of adherent cells 287

CONTENTS

VOL. 13, NO. 1, JANUARY 1980

I. H. Barfod and N. M. Barfod. Cell-production rates estimated by the use of vincristine sulphate and flow cytometry. I. An *in vitro* study using murine tumour cell lines 1

I. H. Barfod and N. M. Barfod. Cell-production rates estimated by the use of vincristine sulphate and flow cytometry. II. Correlation between the cell-production rates of ageing ascites tumours and the number of S phase tumour cells 9

J. J. O'Leary, C. Mehta, D. J. Hall and A. Rosenberg. Quantitation of [^{3}H]thymidine uptake by stimulated human lymphocytes 21

L. R. Hanrahan, J. J. O'Leary, C. Mehta and A. Rosenberg. Kinetics of human lymphocyte responses *in vitro*: the phase of exponential growth 33

J. J. O'Leary, L. R. Hanrahan, C. Mehta and A. Rosenberg. Kinetics of human lymphocyte responses *in vitro*: determination of clone size and initial rate of entry into DNA synthesis 41

J. V. Moore, H. A. Hopkins and W. B. Looney. Dynamic histology of a rat hepatoma and the response to 5-fluorouracil 53

G. S. Nakai and Hella Gergely. Effect of Ehrlich ascites cell chalone on nascent DNA synthesis in isolated nuclei 65

Fiona A. Stewart, Juliana Denekamp and D. G. Hirst. Proliferation kinetics of the mouse bladder after irradiation 75

D. G. Hirst, Juliana Denekamp and B. Hobson. Proliferation studies of the endothelial and smooth muscle cells of the mouse mesentery after irradiation 91

G. Standen, M. A. Philip and J. Fletcher. The proliferative state of granulocytic progenitor cells in human blood and marrow 105

Book Reviews 115

VOL. 13, NO. 2, MARCH 1980

S. P. Tomasovic, J. L. Roti Roti and L. A. Dethlefsen. Matrix algebraic simulation of mitotic cell selection experiments 117

C. Streffer, D. van Beuningen, M. Mollis, N. Zamboglou and S. Schulz. Kinetics of cell proliferation in the pre-implanted mouse embryo *in vivo* and *in vitro* 135

G. Briganti, G. Levi, E. Spalletta, L. Galloni and F. Mauro. Effect of bleomycin on mouse haemopoietic colony forming cells in culture (CFUc) 145

R. M. Klein. Analysis of intestinal cell proliferation after guanethidine-induced sympathectomy. III. Effects of chemical sympathectomy on circadian variation in mitotic activity 153

E. K. Rofstad, E. O. Pettersen, T. Lindmo and R. Oftebro. The proliferation kinetics of NHIK 1922 cells *in vitro* and in solid tumours in athymic mice 163

H.-P. Beck. Evaluation of flow cytometric data of human tumours. Correction procedures for background and cell aggregations 173

PROCEEDINGS OF THE XTH MEETING OF THE EUROPEAN STUDY GROUP FOR CELL PROLIFERATION, held at Knokke-Bruges, Belgium 9–13 October 1979 183

VOL. 13, NO. 3, MAY 1980

P. WEBB, A. D. CHANANA, E. P. CRONKITE, J. A. LAISSUE and D. D. JOEL. Comparison of DNA renewal in germ-free and conventional mice using [^{125}I]iododeoxyuridine and [^{3}H]thymidine 227

R. S. CAMPLEJOHN, B. SCHULTZE and W. MAURER. An *in vivo* double labelling study of the subsequent fate of cells arrested in metaphase by Vincristine in the JB-1 mouse ascites tumour 239

P. SASSIER and M. BERGERON. Existence on an endogenous inhibitor of DNA synthesis in rabbit small intestine specifically effective on cell proliferation in adult mouse intestine 251

B. STORRIE, M. W. KONRAD, and D. A. GLASER. Arrested growth of Chinese hamster ovary (CHO) cell colonies on agar 263

J. M. COLLINS, D. E. BERRY and C. B. BAGWELL. Variability of short-term cultures of HeLa S-3 cells: changes in DNA distributions and rates of DNA synthesis 277

D. ZIPORI. *In vitro* proliferation of mouse lymphoblastoid cell lines: growth modulation by various populations of adherent cells 287

P. DEAN. A simplified method of DNA distribution analysis 299

MICHÈLE DEMEESTERE, SARA ROCKWELL, A.-J. VALLERON, EMILIA FRINDEL and M. TUBIANA. Cell proliferation in EMT6 tumours treated with single doses of X-rays or hydroxyurea. II. Computer simulations 309

H. CROIZAT, E. FRINDEL and M. TUBIANA. The effect of partial body irradiation on haemopoietic stem cell migration 319

REVIEW ARTICLE

R. S. CAMPLEJOHN. A critical review of the use of Vincristine (VCR) as a tumour cell synchronizing agent in cancer therapy 327

VOL. 13, NO. 4, JULY 1980

D. SCHOENFELD and R. F. KALLMAN. Determining the labeling index in autoradiography 339

A. I. FARBMAN. Renewal of taste bud cells in rat circumvallate papillae 349

MARGARET A. SCRAGG and N. W. JOHNSON. A comparison of *in vivo* and *in vitro* stathmokinetic methods for the study of cell proliferation in hamster oral epithelia 359

R. SCHULTE-HERMANN and E. SCHMITZ. Feedback inhibition of hepatic DNA synthesis 371

A. J. FRANKO and R. F. KALLMAN. Cell loss and influx of labeled host cells in three transplantable mouse tumors using [^{125}I]UdR release 381

H.-S. LIN. Peritoneal exudate mononuclear phagocyte colony-forming cells: their proliferative state *in vivo* and sensitivity to cytotoxic agents 395

BETHAN M. HUBBARD and J. W. HOPEWELL. Quantitative changes in the cellularity of the rat subependymal plate after X-irradiation 403
I. FEHÉR and JULIA GIDALI. Protection of cycling CFUs against hydroxyurea by low doses of actinomycin D 415
H. O. KLEIN. Cell kinetic alterations in normal and neoplastic cell populations *in vitro* and *in vivo* following vincristine. A reply to Dr Camplejohn's review article 425
K. HAMATANI and M. AMANO. Different labelling patterns in mouse lymphoid tissues with [^{3}H]deoxycytidine and [^{3}H]thymidine 435
BRIEF COMMUNICATIONS
N. BLAES, M. C. BOURDILLON, B. CROUZET and J. P. BOISSEL. Variations in growth and cell cycle time of arterial smooth muscle cells cultured at low density 445
G. G. STEEL. Species-dependent growth patterns for mammalian neoplasms 451
G. F. BRUNTON and T. E. WHELDON. The Gompertz equation and the construction of tumour growth curves 455

VOL. 13, NO. 5, SEPTEMBER 1980

S. ZIETZ. FP_1 analysis. I. Theoretical outline of a new method to analyze time sequences of DNA histograms 461
S. ZIETZ, S. LESSIN, M. GRATTAROLA, C. DESAIVE and C. NICOLINI. FP_1 analysis. II. Use of the method to monitor the *in vivo* kinetics of cell populations perturbed by hydroxyurea 473
W. A. AHERNE, A. M. ZAITOUN, I. LAUDER and D. L. HULL. Cytokinetic changes in the thymus of tumour-bearing and of dexamethasone-treated mice 485
R.-M. BÖHMER. Determination of non-proliferating cells in culture by combining flow cytometry with stathmokinetics 497
G. WAGEMAKER and T. P. VISSER. Erythropoietin-independent regeneration of erythroid progenitor cells following multiple injections of hydroxyurea 505
J. L. HOPPER, J. M. RADLEY and G. S. HODGSON. A random walk model for the analysis of the isoprenaline-stimulated response of the rat submaxillary gland 519
J. L. CHERTKOV and OLGA A. GUREVITCH. Self-maintenance ability and kinetics of haemopoietic stroma precursors 535
M. LOEFFLER and H. E. WICHMANN. A comprehensive mathematical model of stem cell proliferation which reproduces most of the published experimental results 543
BRIEF COMMUNICATION
M. POTMESIL and A. GOLDFEDER. Cell kinetics of irradiated experimental tumors: cell transition from the non-proliferating to the proliferating pool 563

VOL. 13, NO. 6, NOVEMBER 1980

I. TANNOCK. Guest Editorial. Cell kinetics—where to now? 571
J. B. KURZ and D. L. FRIEDMAN. New methods of cell cycle analysis based on the selective tagging of cells either at the beginning or end of S phase 575
K. B. WOO, W. K. FUNKHOUSER, C. SULLIVAN and O. ALABASTER. Analysis of the proliferation kinetics of Burkitt's lymphoma cells 591

M. Olivotto and F. Paoletti. Studies on the kinetics of initial cycle progression *in vitro* of ascites tumour cells subsequent to isolation from ascites fluid 605
Linda Simpson-Herren, T. H. Corbett and D. P. Griswold. The cell population kinetics and response to an S-phase specific agent of three transplantable colon tumor lines 613
E. Thorud, O. P. F. Clausen, R. Bjerknes and E. Aarnæs. The stathmokinetic method *in vivo*. Time–response with special reference to circadian variations in epidermal cell proliferation in the hairless mouse 625
L. Franzen and K. Norrby. Local mitogenic effect of tissue mast cell secretion 635
N. A. Wright and D. R. Appleton. The metaphase arrest technique. A critical review 643
Proceedings of the Cell Kinetics Society. Fourth Annual Meeting, 26–29 March 1980, Lexington, Kentucky, U.S.A. 665
Author Index to Volume 13 695